LOUDOUN COUNTY PLANNING COMMISSION

ACTION SUMMARY

THURSDAY, MARCH 5, 2009

6:00 P.M. WORKSESSION **LOCATION: PURCELLVILLE ROOM**
Government Center
1st Floor

Commissioners Present: Robert Klancher, Vice-Chairman, Broad Run District; Erin Austin, Catoctin District; Chris Brodrick, Potomac District; Sandra Chaloux, Dulles District; Michael Keeney, Sugarland Run District; Gigi Robinson, Leesburg District; Helena Syska, Sterling District; Christeen Tolle, At Large.

Commissioners Absent: Peggy Maio, Chairman, Blue Ridge District.

Staff Present: Julie Pastor, Director of Planning; Jill Allmon, Beth Hilkemeyer, Management Services; Andy Beacher, Lou Mosurak, George Phillips, Art Smith, Office of Transportation Services; Planner: Marie Genovese, Nancy Bryan, Recording Secretary.

1. ACTION SUMMARY REVIEW

a. The Action Summary of February 12, 2009 was approved. (7-0-1-1, Syska abstained; Maio absent)
b. The Action Summary of February 19, 2009 was approved. (4-0-4-1, Brodrick, Keeney, Klancher, Syska abstained; Maio absent)

2. DISCLOSURES

There were no disclosures.

3. CPAM 2005-0009, COUNTYWIDE TRANSPORTATION PLAN UPDATE

A. Dulles Greenway Capital Improvement Plan

Mr. E. Thomas Sines, CEO, TRIP II, L.P. provided an overview of the Dulles Greenway Capital Improvement Plan. Since 2005, the following projects have been completed: mainline plaza expansion to 18 lanes; Route 606 bridge widening to 6 lanes and interchange improvements; Route 607 bridge widening to 6 lanes; Route 772 bridge widening to 6 lanes; construction of Shreve Mill Road interchange; construction of Battlefield Parkway interchange; Greenway roadway and bridge widening to 6 lanes. In 2009 the milling and asphalt overlay of 30 lane miles, a violation enforcement system, and Ramp E connection to Dulles Airport will be completed. 115 million dollars was spent on the projects from 2005-2009. From 2010-2021, the following projects will move forward, depending on traffic capacity and funding availability: toll system and equipment upgrade; DTR eastbound and westbound connector widening to 6 lanes (including Route 28 bridges); 100 lane miles of milling and overlay; UPLIC connector bridge construction; Route 659 bridge widening to 6 lanes and interchange improvements; Greenway roadway and bridge expansion to 8 lanes. The Greenway is ready to accommodate Metro.

B. Transportation Modeling

Transportation modeling is a planning tool that uses sets of equations to connect large amounts of data with assumptions on human behavior in order to forecast travel. Key assumptions include demographic assumptions about the demand for travel, land use information, households, and jobs; and engineering assumptions about the road network, such as width of the road and types of terrain.

The Four-Step Modeling Process is the most common method used to forecast travel demand, and all U.S. Metropolitan areas use this process to replicate and simulate regional travel. The four steps are Trip Generation, Trip Distribution, Mode Split, and Trip Assignment. The Loudoun County transportation model implements the four-step process using a software program called TP+, which is the model platform used by the Metropolitan Washington Council of Governments (COG) for their regional model. COG's model has been developed and refined over many years with a large body of research and testing. The Loudoun model is based on the COG Model but with finer roadway detail in Loudoun County. Model Inputs are road network, road characteristics, traffic analysis zones, and demographics.

Demographic data are forecasts by jurisdictions and are reviewed by COG. Two inputs that go into the transportation modeling are Households, which includes income and number of automobiles; and Jobs, which includes retail, office, industrial, and other. The Fiscal Impact Committee Guidelines reflect the review and analysis of key demographic inputs and assumptions that significantly affect residential and nonresidential forecasts for Loudoun County. A summary of the forecasted population, housing units, households, and employment for Loudoun County through 2035 is found in this document. The basis for the forecast is the current planned land use. Current conditions are also taken into account.

Model calibration takes place at each step of the modeling process and involves the refinement of specific parameters and coefficients in the model. Model validation compares model outputs (traffic volumes) to observed conditions (traffic counts).

Volumes on each link of roadway network and information that can be derived from the volumes come out of the model. This information includes travel patterns, excess demand and capacity on roadways, and statistics including vehicle miles traveled and hours of travel both congested and uncongested.

The output information is used to identify trouble spots in the planned network; test alternative policy options to address congestion concerns; make recommendations based on analysis and environmental constraints; and recommend priorities for improvements.